

Application No.: 10/768,438

Docket No.: TOW-063

REMARKS

Upon entry of this paper, claims 1 and 5 are amended. Support for the amendments can be found specifically at Figures 2, 4-6 and corresponding text of the Present Application. Claims 4 and 10-18 were previously canceled. Claims 19 and 20 are added. No new matter is introduced. Claims 1-3, 5-9 and 19-20 are pending, of which claims 1 and 5 are independent. Applicants respectfully submit that the pending claims define over the art of record.

Claim Rejections under 35 U.S.C. §103

Claims 1 and 5-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,689,502 to Choi (hereafter "Choi") in view of the International Patent Application Publication No. WO 02/080299 (English equivalent U.S. Patent No. 7,081,317 to Fujii et al.) (hereafter "WO '299").

Claim 2 is rejected under 35 U.S.C. §103(a) as being unpatentable over the Choi reference, in view of the WO '299 reference, and further in view of U.S. Patent No. 7,038,424 to Adams et al. (hereafter "Adams").

Claim 3 is rejected under 35 U.S.C. §103(a) as being unpatentable over the Choi reference, in view of the WO '299 reference, and further in view of U.S. Patent No. 6,497,974 to Fuglevand (hereafter "Fuglevand").

The Choi reference teaches a monopolar fuel cell where the cells in the single cell area are electrically connected in series to each other. The anodes (121) and (122) and the cathodes (131) and (132) are connected in series by a zigzag connection structure through the first and second conductive portions (141) and (142) positioned on the first and second surfaces of the ion exchange membrane (101). See Col. 5, lines 23-29 and Figures 4-7.

However, Choi reference does not teach or suggest that *sections of the first metal diffusion layer corresponding to the intermaterial sections provided around each anode and each cathode:*

electrically couple a first anode to a first cathode, wherein the first anode is adjacent to the first cathode; and electrically insulate a second anode from a second cathode, wherein the second anode is adjacent to the second cathode; and

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sections of the second metal diffusion layer corresponding to the intermaterial sections provided around each anode and each cathode:

electrically insulate the first anode from the first cathode; and electrically couple the second anode to the second cathode," as required by amended claims 1 and 5.

The WO '299 reference is cited by the Examiner to show that a plurality of fuel cells, each comprising a plurality of power generation units may be arranged on a same plane and connected in a series or parallel configuration using a switching mechanism. The WO '299 reference does not teach or suggest elements of amended claims 1 and 5, as illustrated in Figs. 2 and 4-6 of the present application.

Claims 6-9 depend from claim 5 and, as such, incorporate each and every element of claim 5. In light of the arguments presented above, the Choi reference, alone or in combination with the WO '299 reference do not disclose each and every element of claims 1 and 5. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1 and 5-9 under 35 U.S.C. §102(e).

Claims 2 and 3 depend from claim 1 and, as such, incorporate each and every element of claim 1.

The Adams reference is cited by the Examiner to show that a variable resistor may be used to connect to fuel cells. The Adams reference does not teach or suggest elements of amended claims 1 and 5, as illustrated in Figs. 2 and 4-6 of the present application.

The Fuglevand reference is cited by the Examiner to show that different modules may be connected in series and/or in parallel via a switching circuitry depending on the load requirement. The Fuglevand reference also does not teach or suggest elements of amended claims 1 and 5, as illustrated in Figs. 2 and 4-6 of the present application.

In light of the arguments presented above, the Choi reference, alone or in combination with the WO '299, Adams and Fuglevand references do not disclose each and every element of claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 2 and 3 under 35 U.S.C. §102(e).

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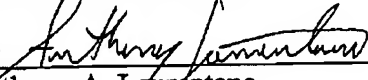
CONCLUSION

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. TOW-063. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. § 1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

Dated: October 26, 2007

Respectfully submitted,

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